ABSTRACT OF THE DISCLOSURE

A multiresolution coding section includes a wavelet transformation section for performing a wavelet transformation process on an image signal to obtain coefficient signals, a coefficient transformation section for performing a coefficient transformation process, which corresponds to image processing, on the coefficient signals to obtain processed coefficient signals, and a coding section for performing a coding process on the processed coefficient signals to obtain processed coded data. A restoration section includes a decoding section for decoding the processed coded data to obtain the processed coefficient signals, and an inverse wavelet transformation section for performing an inverse wavelet transformation process on the processed coefficient signals to obtain a processed image signal subjected to the image processing. In the process of transforming an image signal to coded data, image processing is performed in parallel with a coding process so that a processed image can be quickly displayed only by performing a restoration process.